



# Using Audio to Convey Mind/Body Approaches to Cancer

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## Abbreviated Abstract

An experienced public radio production company will develop a series of spoken-word audio presentations for patients about mind/body approaches to cancer survivorship. A trial of cancer patients will then compare mind/body outcomes for patients who listened to the audio series with outcomes for those who did not.

## Primary Investigator

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## Research Team & Affiliations

David Freudberg, PI and Executive Producer, Human Media

Leo Stolbach, MD, Consultant in Medical Oncology, St. Vincent Hospital

John F. Kelly, PhD, Assistant Professor in Psychiatry, Harvard Medical School

## Total Budget

\$1,098,394

## Research Objectives

### AIMS

1. Research program content themes and identify prospective interviewees.
2. Arrange and conduct audio interviews with medical experts, cancer survivors, and others.
3. Edit, script, assemble, and test productions with cancer patients.
4. Research and test emerging audio delivery technologies.

## Theory/Hypothesis

### Primary Hypotheses:

1. Patient use of the audio program package describing the value of mind/body approaches for cancer patients will increase the rate of participation in formal mind/body programs, as compared to the control group.
2. Patient use of the audio program package will increase the rate of participation of cancer patients in mind/body self-care practices, as compared to the control group.

### Secondary Hypotheses:

1. Patient use of the audio program package will improve psychological functioning measured in terms of reduced depression, reduced anxiety, and better ability to cope with life's stresses, as compared to the control group.
2. Patient use of the audio program package will improve quality of life, as compared to the control group.



3. Within the experimental group, participation in a formal mind/body program or daily mind/body self-care practices will improve psychological functioning, compared to patients who do not participate.

## Experimental Design

To test the effectiveness of the programs, patients who received CD copies of the audio programs and a related brochure were compared to patients who received only the brochure in a randomized controlled trial.

## Final Sample Size & Study Demographics

In total, 161 cancer patients recruited from two Boston area hospitals consented to participate in the current study, and 131 completed the intake assessment and were successfully randomized to receive either the brochure alone or the brochure and audio CD program package. Study participants were almost 60 years old, on average. Three-quarters of the sample were of Caucasian race, and three-quarters were female. Overall, the sample was highly educated. Just over half were married. Just under half were not working at the time of study entry, and an additional one in five participants were retired.

## Data Collection Methods

Questionnaires at baseline and 2 and 5 months post-intervention

## Outcome Measures

- Rate of participation by cancer patients in comprehensive mind/body clinical programs or similar interventions by mind/body professionals (measured with a mind/body questionnaire)
- Measurable psychological status and quality of life (measured with a Functional Assessment of Cancer Therapy scale, a Brief Symptom Inventory, a Mental Adjustment to Cancer Scale, and the Short Form-36 survey)
- Likelihood of adopting mind/body self-care practices

## Evaluation Methods

Change scores were compared between patients who listened to the audio series and received a brochure on mind/body resources and patients who received only the brochure.

## Research Results

The results revealed that, through 5 months of follow-up, cancer patients who received mind/body CD audio programs in addition to an informational brochure and listing of local mind/body programs were significantly more likely to begin and maintain participation in community mind/body programs than were patients who received the informational brochure and listings alone. Furthermore, receiving the mind/body CD audio package appeared to stimulate interest in mind/body practices, as evidenced by greater additional reading on the topic. In addition, at the 2-month follow-up, patients assigned to receive the mind/body CD audio package were more likely to use visualization/guided imagery and to practice relaxation exercises as a way of coping with the suffering caused by cancer. However, these differences in self-care practices did not extend to the 5-month follow-up. Finally, at 2 months, patients assigned to the experimental condition were more likely to employ cognitive strategies to challenge their thinking, a trend that persisted through the 5-month follow-up; they were also more likely at the 5-month follow-up to have tried to increase their spiritual practices. Patients were found to improve generally in aspects of quality of life (i.e., in physical and functional domains) across the 5 months that they were followed in the study. However, contrary to expectations, this improvement was unrelated to study group assignment. Instead, the observed improvements may possibly reflect a general positive



response to medical treatment received. Finally, cancer patients who listened to at least some of the CD content reported a generally favorable response regarding how helpful the programs were, and most reported that the CD programs increased their understanding of and interest in mind/body approaches and would recommend the materials to other cancer patients.

## **Barriers & Solutions**

### **Product(s) Developed from This Research**

Walking through the Storm: Audio programming available on CD, online, and through other media